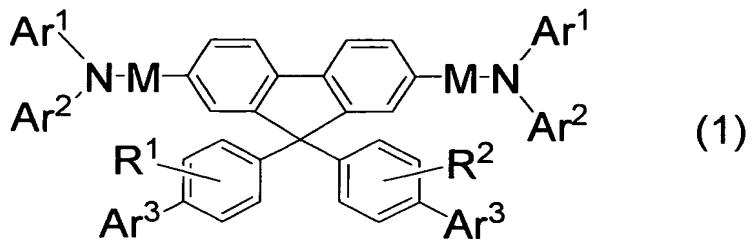


CLAIMS

1. An amine compound represented by the general formula (1):



wherein R¹ and R² each independently represents hydrogen atom, a linear, branched or cyclic alkyl group or alkoxy group, an aryl group, an aryloxy group or a halogen atom; Ar¹ and Ar² each independently represents a substituted or unsubstituted aryl group or heteroaryl group, and may form a nitrogen-containing heterocyclic ring together with the nitrogen atom bonded thereto; and Ar³ each independently represents a substituted or unsubstituted phenyl group, naphthyl group, biphenylyl group, terphenylyl group, anthryl group, fluorenyl group or pyridyl group (except for amino-substituted groups); and M represents a single bond, an arylene group or a heteroarylene group.

2. The amine compound as claimed in claim 1, characterized in that at least one of Ar¹ and Ar² is a substituted or unsubstituted condensed ring aromatic group.

3. The amine compound as claimed in claim 2, characterized in that the condensed ring aromatic group is 1-naphthyl group, 9-phenanthryl group, pyrenyl group or 2-fluorenyl group.

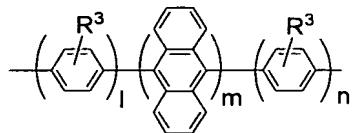
4. The amine compound as claimed in claim 1, characterized in that in the general formula (1), Ar¹ and Ar² each independently is phenyl group, 4-methylphenyl group or 4-biphenylyl group.

5. The amine compound as claimed in claim 1, characterized in that in the general formula (1), Ar³ is phenyl group, 3,5-diphenylphenyl group, 1-naphthyl group, 4-biphenylyl group, 4-terphenylyl group, 9-anthryl group, 10-phenyl-9-anthryl group or 10-(3,5-diphenylphenyl)-9-anthryl group.

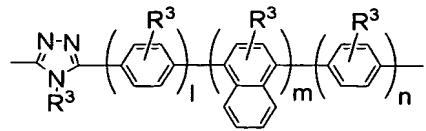
6. The amine compound as claimed in claim 1, characterized in that in the general formula (1), M is phenylene group, 1,4-naphthalenediyl group, 2,6-naphthalenediyl group, 4,4'-biphenyldiyl group, 4,4'-terphenyldiyl group, 9,10-anthracenediyl group or 2,7-9,9'-dialkylfluorenediyl group.

7. The amine compound as claimed in claim 1, characterized in that in the general formula (1), M is the

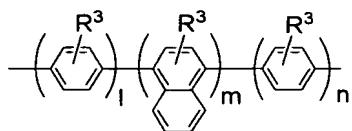
following general formulae (2a) - (2f) :



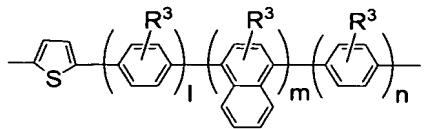
(2a)



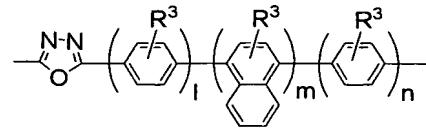
(2d)



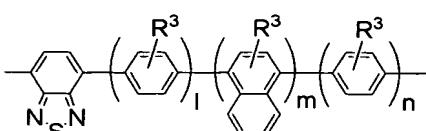
(2b)



(2e)



(2c)

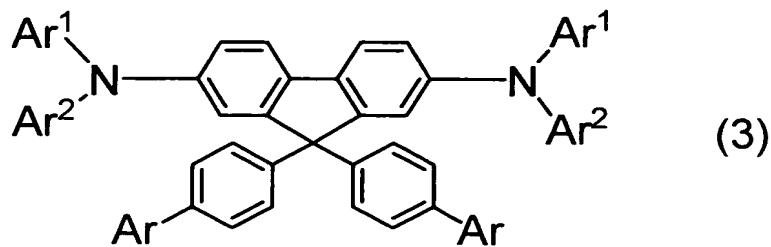


(2f)

wherein R^3 represents hydrogen atom, an alkyl group or alkoxy group having from 1 to 18 carbon atoms, or an aryl group having from 6 to 12 carbon atoms; and l , m and n represent a positive integer satisfying $1 \leq l+m+n \leq 4$.

8. The amine compound as claimed in claim 1, characterized in that R^1 and R^2 are hydrogen atom.

9. The amine compound as claimed in claim 1, characterized in that R^1 and R^2 are hydrogen atom, and M is a single bond, and it is represented by the following general formula (3) :



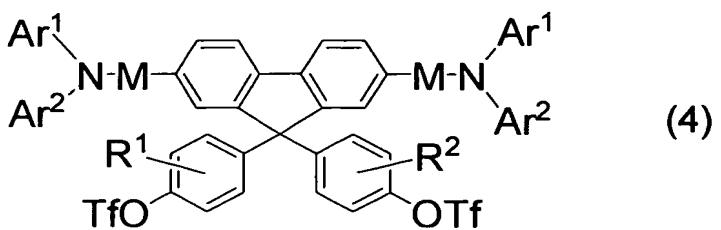
wherein Ar¹ and Ar² each independently represents substituted or unsubstituted aryl group or heteroaryl group, and may form a nitrogen-containing heterocyclic ring together with the nitrogen atom bonded thereto; and Ar represents phenyl group, 4-methylphenyl group, 3,5-diphenylphenyl group, 1-naphthyl group, 4-biphenylyl group, 4-terphenylyl group, 9-anthryl group, 10-phenyl-9-anthryl group or 10-(3,5-diphenylphenyl)-9-anthryl group.

10. The amine compound as claimed in claim 9, characterized in that Ar¹ and Ar² each independently is phenyl group, 4-methylphenyl group, 4-biphenylyl group or 1-naphthyl group.

11. The amine compound as claimed in claim 1, characterized by having an amorphous structure.

12. The amine compound as claimed in claim 9, characterized by having an amorphous structure.

13 A process of producing the amine compound as claimed in claim 1, characterized by reacting fluorene derivatives represented by the following general formula (4) and arylboronic acid represented by the following general formula (5) in the presence of a palladium catalyst.



wherein R^1 and R^2 each independently represents hydrogen atom, a linear, branched or cyclic alkyl group or alkoxy group, an aryl group, an aryloxy group or a halogen atom; Ar^1 and Ar^2 each independently represents a substituted or unsubstituted aryl group or heteroaryl group, and may form a nitrogen-containing heterocyclic ring together with the nitrogen atom bonded thereto; M represents a single bond, an arylene group or a heteroarylene group; and Tf represents trifluoromethanesulfonyl group,



wherein Ar^3 represents a substituted or unsubstituted phenyl group, naphthyl group, biphenylyl group, terphenylyl group, anthryl group, fluorenyl group or pyridyl group (except for amino-substituted groups).

14. An organic electroluminescence device, characterized by using the amine compound as claimed in claim 1 in either of a luminescent layer, a hole transport layer or a hole injection layer.